CATTLE TICKS

PROGRAM PROFILE

Goal	Prevent the re-establishment of the cattle fever tick, Boophilus annulatus and B. microplus in the United States and maintain a permanent buffer zone along the Texas-Mexico border.
Legislation	21 USC 114; Animal Industry Act of 1884.
Economic Significance	When the program began in 1906, losses from cattle fever ticks were $40 to $60 million annually. The benefit/cost ratio for the Texas program was estimated to be 172:1 in 1976.
Principal Approach and Methods Used to Achieve Goals	The Texas cattle tick programs is a cooperative Federal-State-Industry program. Program methods are inspection, quarantine, epidemiology, treatment of infested and exposed animals, and vacating pastures.
History	In the continental United States, the program began in 1906. Cattle fever ticks were eradicated by 1943. Since then, occasional outbreaks have been eradicated. Tick inspectors maintain a barrier zone along the Texas-Mexico border. In Puerto Rico the program began in 1936. By 1952, cattle fever ticks were eradicated; however, TBT A. variegatum, was discovered on the island in 1974 and cattle fever ticks were found there in 1978. Infestations of A. variegatum TBT were eliminated from the island municipality of Culebra in 1988 and were thought to be eradicated from the main island in 1991; however, an infestation was discovered several months later in 1992. In 1994, the premises involved in the Puerto Rico infestation were released and the island again is free of the tropical bont tick. In FY 1996, APHIS ended its involvement with the cattle fever tick program in Puerto Rico.
State and Local Cooperation	No matching requirements, but Texas contributes to the program.
Involvement of Other Agencies	Agricultural Research Service

RESOURCE DATA

	Obligations			
	Direct	Reimbursement	User Fees	Staff-Years
FY 1997	4,912,406	--	--	106
FY 1998	4,848,970	--	--	108
FY 1999	5,119,784	--	--	106
FY 2000 (est.)	4,996,000	--	--	105
FY 2001 (est.)	5,276,000	--	--	105

	APHIS	Coop	Total	CCC	Contingency Fund
Cum.	$156,548,832	$52,338,647	$208,887,479	--	$1,583,649

RECENT ACCOMPLISHMENTS

Tick Control

This program is a cooperative Federal-State-industry effort to prevent the re-establishment of cattle fever ticks, *Boophilus annulatus* and *B. microplus*, in the United States by maintaining a permanent buffer zone along the Texas-Mexico border, where the Rio Grande River serves as a natural barrier. During FY 1999, we controlled tick infestations through the use of a permanent quarantine zone, with systematic patrols and inspections carried out by animal health inspectors on horseback. All livestock crossing the border and entering or leaving the quarantine zone were examined and treated for ticks. As a result, cattle fever ticks have not become established beyond the original quarantine line which has been in place since 1936.

Infested Premises

By the end of FY 1999, there were 44 infested premises under quarantine. Thirty-six of these were in the tick eradication quarantine zone and 8 were in the free zone. This compares with 19 infested premises under quarantine at the end of FY 1998. The increase in the number of infested premises under quarantine is most likely the result of recurring infestations caused by the movement of wildlife, especially exotic game and white-tailed deer, and the movement of stray and feral animals out of Mexico into the United States. All infested premises are in full

compliance with regulations to ensure that the cattle ticks will not spread.

Eradication Technology

The Agricultural Research Service (ARS) has developed new eradication technology to solve the problem of recurring infestations caused by wildlife movement. The new technology involves providing a systemic pesticide (selective so that only the target organism on a specified host is affected) to wildlife through pesticide-medicated baits. We could not implement the technology because the manufacturer refused to support its use in a minor use program. Since the patent for the pesticide has expired for the original manufacturer, APHIS is searching for another company that would be willing a produce the pesticide-medicated bait.